Serial No.: 11/712,051

Filed: November 14, 2003

Art Unit: 1742

REMARKS/ARGUMENTS

Claims 1-19 are pending in this application. By this amendment, claims 2, 4, 6, 8-15, 17

and 19 have been cancelled without prejudice and purely in the interests of speeding

prosecution, claim 1 has been amended, and new claim 20 has been added. No new

matter has been added.

By this amendment, the claims rejected by the Examiner under 35 USC 112, second

paragraph, have been cancelled without prejudice.

The Examiner has rejected the remaining claims in the application under 35 USC 102(b)

or 35 USC 103(a) based on Maynard (US Patent 5,405,337), Grummon (US Patent

6,260,818) or Sieminski et al. (US Patent 6,342,314).

Applicant has amended claim 1 to include the elements of: "a flexible transport tube

suitable for use inside a human body as an artificial part of the human gut" and "a two-

way shape memory alloy having a coil form" functioning to provide "peristaltic

movement". Applicant submits that at least these elements are not taught or suggested

by any of the references, either alone or in combination.

More particularly, none of the references describe a two-way shape memory alloy as

claimed in claim 1. A two-way shape memory alloy is similarly efficient and responsive

both when contracting and when returning to its original shape. This is particularly

important in application to artificial parts for the human gut/gastrointestinal tract. None of

the references teach or suggest this difference between one-way and two-way shape

metal alloys. In focusing on generic shape metal alloys, the references do not consider

or suggest applications in which two-way shape metal alloys are more beneficial or are

needed. In fact, the references tend to teach away from the present embodiments by

5

Serial No.: 11/712,051 Filed: November 14, 2003

Art Unit: 1742

focusing on the one-way properties and applications of shape metal alloys and there

would be no motivation to consider two-way shape metal alloys.

Further, both Maynard and Grummon deal with shape memory alloys as a film rather

than as a coil form. One of skill in the art would understand that a film shape metal alloy

cannot be made two-way. Further, even if possible, a film would not have the same two-

way properties as a coil in that the coefficient of contraction of a film would have to be

lower than that of a coil because the film is less efficient in returning to its original

shape. As such, Maynard and Grummon do not teach a two-way shape memory alloy

having a coil shape nor do they suggest the use of a two-way shape memory alloy

having a coil shape. Again, by dealing with the benefits of the film shape metal alloy,

these references actually teach away from the coil form.

Still further, although the references provide some medical related examples of

applications for shape metal alloys, they do not teach or suggest applications for use

inside a human body as an artificial part of the gut/gastrointestinal tract and to provide

peristaltic movement, as claimed in claim 1. Maynard discloses the use of a film shape

metal alloy wrapped around a tube where the tube is a catheter but does not suggest

the semi-permanent installation of a tube inside of a human body as an artificial part of

the gut/gastrointestinal tract. Grummon deals with a shape memory alloy wrapped

around veins or arteries but also does not suggest a flexible tube to be inserted in a

human body as an artificial part of the gut/gastrointestinal tract. Lastly, Sieminski et al.

is related to a technology for desirably shaping a diffusion tube in a ventilation system

for metal-air cells, a technology area that is widely separated from that in the current

application.

For the above reasons, Applicant submits that independent claim 1 is now in condition

for allowance. For at least similar reasons, as well as the additional features therein,

6

Serial No.: 11/712,051

Filed: November 14, 2003

Art Unit: 1742

Applicant submits that the dependent claims 3, 5, 7, 16 and 18 are also in condition for

allowance.

New independent claim 20 is of similar scope or more restricted than independent claim

1 and for at least similar reasons is also believed to be in condition for allowance.

CONCLUSION

In view of the foregoing comments, it is respectfully submitted that the application is

now in condition for allowance. Favorable action on this application is respectfully

requested. If the Examiner has any further concerns regarding the language of the

claims or the applicability of the cited references, the Examiner is invited to contact the

undersigned.

Dated: 2.21.2006

Respectfully submitted,

Ralph A. Dowell

Registration No. 26,868

Dowell & Dowell, P.C.

2111 Eisenhower Ave., Suite 406

Alexandria, VA 22314

U.S.A.

Telephone: 703-415-2555

Fax:

703-415-2559

B&P14362-9/NH

7